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(71) Applicant : TEXAS INSTRUMENTS LIMITED
Manton Lane
Bedford MK41 7PA (GB)

(72) Inventor : Ritchie, James Kenneth Alexander
31 Lovell Road
Bedford, MK42 0LR (GB)
Inventor : Abbott, David
156 Tyne Crescent
Bedford,MK41 7YB (GB)
Inventor : Anderson, Adrian
Trellech Grange
Chepstow, Gwent NG6 6QW (GB)
Inventor : Parris, Clifford
3 Park Glade
Tintern, Gwent NP6 6TX (GB)

(74) Representative : Abbott, David John et al
Abel & Imray Northumberland House 303-306
High Holborn
London, WC1V 7LH (GB)

(54) **Method and apparatus for signal processing.**

(57) A digital demodulator for a NICAM 728 system signal has sampling and digitizing means converting the signal into a succession of digital samples. The digital samples pass through an anti-aliasing digital comb filter to a selector (decimator) that selects one sample in three and feeds it to a second digital filter. Digital matched filters for the in-phase (I) and quadrature (Q) components of the signal effect the demodulation. Carrier and symbols I tracking is carried out digitally. A pulse-width modulated automatic gain control signal is produced for controlling the amplitude of the signal applied to the sampling and digitizing means.
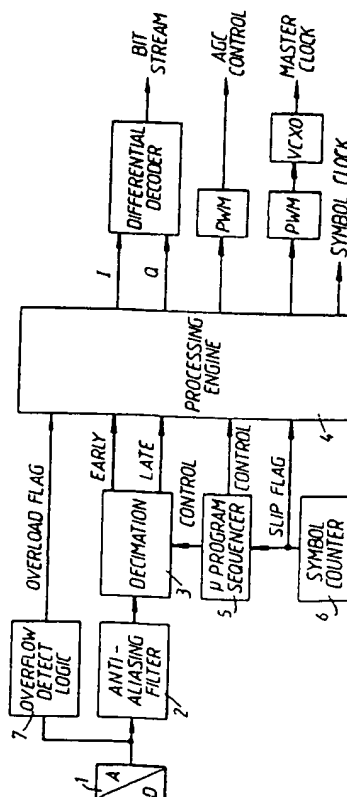
Fig.1.

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X	WO-A-8 904 576 (DEUTSCHE ITT INDUSTRIES GMBH) 18 May 1989	1,2,5, 8-10,13, 18,19, 22,25-29	H04N9/64 H04N9/66 H04N5/60
Y		11	
A	* the whole document *	12,14	
Y	ELEKTRONIK, vol.39, no.6, 16 March, 1990, München, DE, XP000102222, pages 50-54,56; T. HILPERT et al.: 'Digitaler Multistandard-Audio-Chipsatz'	11	
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A	& MICRONAS MAS7A101 data sheet: 'NICAM QPSK demodulator', 10 September, 1990, Epsoo, FI, pages 1-10 * complete paper *	1-14, 18-29	
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	11 MAY 1993	HOEKSTRA A.

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	11 MAY 1993	HOEKSTRA A.

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